



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/507,013	09/08/2004	Hiroshi Matsubayashi	Q83539	7684
23373	7590	12/26/2007	EXAMINER	
SUGHRUE MION, PLLC			LAVILLA, MICHAEL E	
2100 PENNSYLVANIA AVENUE, N.W.			ART UNIT	
SUITE 800			PAPER NUMBER	
WASHINGTON, DC 20037			1794	
			MAIL DATE	DELIVERY MODE
			12/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/507,013

Applicant(s)

MATSUBAYASHI ET AL.

Examiner

Michael La Villa

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 3-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 3-10 and 12 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
2. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 3. Ascertaining the differences between the prior art and the claims at issue.
 4. Resolving the level of ordinary skill in the pertinent art.
 5. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. Claims 1, 3, 4-10, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miyazaki et al. EP 0 615 840. Miyazaki et al. teaches cans formed of a steel sheet coated with an Fe/Sn alloy layer and with a Sn containing layer, wherein the claimed amount of Sn is obtained and wherein the Sn containing layer is further coated with adhesive and biaxially stretched PET of the claimed polyester layer thickness. PET is quintessential thermoplastic polyester. See Miyazaki et al. (Abstract; page 4, lines 38 through page 5, line 6; page 6, lines 13-43; and Examples 1 and 2). Miyazaki et al. does not teach the claimed silane coupling agent, but rather a thermosetting adhesive. Sakai et al. teaches that improved adhesion between metal plating layer and thermoplastic polyester

can be achieved with silane coupling agent layer of the claimed areal density. See Sakai et al. (Abstract; paragraphs 19-21; 26, 29, and 31). It would have been obvious to one of ordinary skill in the art at the time of the invention to fabricate the laminate of Miyazaki et al. with silane coupling agent, rather than thermosetting adhesive, in order to strongly bond the polyester layer of Miyazaki to the metal plate, as Miyazaki expresses concern about achieving such strong adhesion and as Sakai suggests that silane coupling films are effective for this purpose. With respect to Claims 6 and 7, certain silane coupling agents of Sakai comprise hydrolyzing alkoxyl group and amino group. These agents are encompassed by both components of the mixed solution and/or agents of the two step treatment. Since the claims do not demand that these agents be different compounds, the claimed silane coupling layer is deemed suggested by Sakai. Miyazaki teaches that the polyester can be any conventional polyester and applicant teaches that any conventional polyester is suitable. The claimed polyesters of Claims 9 and 10 are conventional polyesters. It would have been obvious to one of ordinary skill in the art at the time of the invention to utilize any conventional polyester for Miyazaki's layers, including those conventional polyesters that are claimed, since Miyazaki suggests that all such materials would be expected to be effective.

Response to Amendment

7. In view of applicant's amendments and arguments, the section 112, first paragraph rejection and the section 112, second paragraph rejection of the Office Action mailed on 25 January 2007 are overcome and therefore withdrawn.
8. Previously, claims, now rejected over the prior art, had been indicated as being allowable. However, newly considered prior art has warranted the rejections.

Allowable Subject Matter

9. Claim 11 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
10. The reviewed prior art does not teach or suggest the subject matter of Claim 11. Particularly, the claimed polyester/ionomer blend is not taught or suggested in combination with the other claimed limitations.

Conclusion


11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael La Villa whose telephone number is (571) 272-1539. The examiner can normally be reached on Monday through Friday.
12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/507,013
Art Unit: 1794

Page 5

13. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Michael La Villa
18 December 2007


MICHAEL E. LAVILLA PH.D.
PRIMARY EXAMINER